

REMARKS

Responsive to the outstanding Office Action, applicant has carefully studied the Examiner's rejections and the comments relative thereto. Favorable reconsideration of the application is respectfully requested in light of the following detailed arguments.

After amendment, claims 17, 19-22 and 28-42 are pending in this application. In this response, claim 17 has been amended and claim 43 has been canceled. Support for the amendment to claim 17 can be found, at least, on the paragraph bridging pages 1 and 2 and on page 3, lines 28-31. It is respectfully submitted that no new matter has been presented in this amendment.

A request for a three month extension of time, and a Request for Continued Examination, with the appropriate fee, has been submitted herewith.

CLAIM OBJECTION

Claim 43 was objected to as failing to include a period. Claim 43 has been deleted herein thereby rendering the rejection thereagainst moot. Withdrawal of this objections is therefore requested.

REJECTIONS UNDER 35 USC §103

Claims 17, 19-22 and 28-43 were rejected under 35 USC §103 as being unpatentable over US Patent 4,190,698 to De Boel, and further in view of Varma (Pub WO/2002/024445).

Before discussing the prior art, applicant would like to point out for the Examiner's convenience features of the present invention. The present invention, as defined in amended claim 17, relates to a clear intumescent interlayer produced by drying a clear stable aqueous solution comprising an alkali metal silicate waterglass, a water soluble aluminate and a hydroxy carboxylic acid under controlled conditions. The aluminate has been partially neutralized by the hydroxyl carboxylic acid prior to its introduction to the silicate to prevent formation of a precipitate. The interlayer comprises from 10 to 35% by weight of water.

De Boel discloses a light-transmitting fire screening panel comprising at least one sheet of glass and at least one layer of intumescent material. In the layer a hydrated alkali metal silicate is used as intumescent material and one or more adjuvants selected from: urea, polyhydric alcohol (including glycerine, ethylene glycol and sorbitol), monosaccharide (including glucose), polysaccharide (including starch), sodium phosphate, sodium aluminate, aluminum phosphate, borax, boric acid and colloidal silica.

As noted above claim 17 has been amended to clearly indicate that the aluminate used to produce the clear layer has been partially neutralized by the hydroxyl carboxylic acid prior to its introduction to the silicate to prevent the formation of a precipitate. Applicants have found that this use of the hydroxyl carboxylic acid in the partial neutralization step surprisingly prevents precipitation and allows for the formation of optically clear layers.

There is nothing in the De Boel reference to suggest this partial neutralization, nor is there any reason for one skilled in the art to modify De Boel in this manner. De Boel does not suggest that the components would have been added in any particular order, nor that this partial neutralization occurs. It is further submitted that nothing in the Varma reference would overcome this deficiency of De Boel. It is only through the teachings of the present invention that this partial neutralization, to prevent the formation of precipitates, would have taken place prior to the introduction of the aluminate to the silicate.

Based upon the above, it is respectfully submitted that independent claim 17 distinguishes over the applied art of record.

In view of the above it is respectfully submitted that the rejections of the claims under 35 USC §103 have been overcome. Rejection and withdrawal of the pending rejections are therefore respectfully requested.

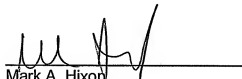
SUMMARY

For the reasons above, it is submitted that independent claim 17 is allowable over the applied art of record. The remaining claims depend directly or indirectly from

claim 17, and are believed to be allowable based, at least, upon their dependence from this allowable base claim as shown above.

Should the Examiner wish to modify any of the language of the claims, applicants' attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark A. Hixon', is written over a solid horizontal line.

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